

REMARKS

Applicants respectfully request reconsideration of the rejections set forth in the Office Action mailed on October 22, 2002. Claims 1-14, 16-18 and 29-44 have been rejected. Claims 1-14 and 29-44 have been cancelled herein without prejudice or disclaimer. Claims 45-57 have been added. Support for these claims can be found, for example, in the Specification at page 16 and in the claims as originally filed. Claims 16-18 and 45-57 are pending.

A clean version of the amended claims with instructions for entry pursuant to 37 C.F.R. §1.121(c)(1)(i) is included above. A marked-up version of the amended claims pursuant to 37 C.F.R. §1.121(c)(1)(ii) is attached as Appendix I.

Claim amendments were made to better define one embodiment of the invention, notwithstanding the Applicants' belief that the unamended claims would have been allowable, without acquiescing to any of the Examiner's arguments, and without waiving the right to prosecute the unamended (or similar) claims in another application, for the purpose of furthering Applicants' business goals and expediting the patent application process in a manner consistent with the PTO's Patent Business Goals. None of the amendments to the claims is related to the statutory requirements of patentability unless expressly stated so herein. Applicants reserve the right to prosecute the originally filed claims in the future.

Rejections under 35 U.S.C. §103

The claims have been rejected under 35 U.S.C. §103(a) as being unpatentable over Hemstreet in view of Sutherland *et al.* U.S. Patent No. 4,818,710 ("Sutherland"). In addition, the claims been rejected under 35 U.S.C. §103(a) as being unpatentable over Hemstreet in view of Sutherland and in further view of Balch U.S. Patent No. 6,083,763 ("Balch") or *In re Venner* (120 USPQ 193); all being taken in view of Rutenberg *et al.* U.S. Patent No. 5,287,272. This rejection is reiterated from the previous Office Action, mailed March 26, 2002. The Examiner maintains that Sutherland describes an oil assembly which is deemed a light guide. This rejection is respectfully traversed.

Applicants respectfully maintain that Sutherland teaches the use of a light source 6 with a waveguide 8. See Fig. 2 of Sutherland. The light source is a xenon flash lamp. The analytical cell or cuvette is based on a microscope slide waveguide system. See Sutherland at column 9, lines 18-20. The waveguide 8 is actually the bottom of the microscope slide. See Sutherland at column 9, lines 20-21. An index matching oil is used between the microscope slide and the

cuvette 7. Two-quarter round silica prisms 16 and 17 form the sides of the oil reservoir. See Sutherland at column 9, lines 25-27. Thus, the "liquid light guide" taught by Sutherland is an oil-filled reservoir formed by a cuvette, a microscope slide, and two silica prisms.

In contrast to Sutherland, the present specification states at page 16 that the light guide is suitably selected to have a *flexible* member that contains a liquid capable of vibrationally isolating the image capturing device from the illumination apparatus and which also can be used to place lamp source at a remote location away from the imaging device. The flexible member substantially keeps any vibration from the lamp assembly away from the imaging device. In the described embodiments and is claimed herein, the light guide is a *flexible* hose-type sleeve filled with a liquid such as an aqueous solution containing chloride or phosphate.

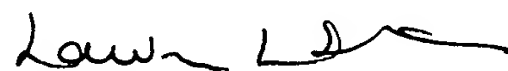
Neither Hemstreet nor Sutherland, either alone or in combination, teach the use of a liquid light guide comprising a flexible hose filled with a liquid in an image capturing system. None of the secondary references cure the lack of suggestion of the primary reference(s) to use a flexible liquid light guide in an image capturing system.

For these reasons, withdrawal of the rejections is respectfully requested.

Conclusion

The Applicant respectfully maintains that all pending claims are in condition for allowance. Therefore, the Applicant respectfully requests a Notice of Allowance for this Application from the Examiner. Should any unresolved issues remain, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,
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MARKED UP VERSION OF AMENDED CLAIMS

16. (Amended) A system for capturing cellular information from a population of cells, the system comprising:

an image acquisition system comprising a charged coupled camera adapted to capture an image of a plurality of manipulated cells, the illumination apparatus providing for an acquisition of the image of the plurality of manipulated cells;

an illumination apparatus comprising a flexible liquid light guide coupled to the image acquisition system for highlighting the plurality of manipulated cells, wherein the flexible liquid light guide comprises a flexible **[member suitably arranged to contain the liquid] hose-type sleeve wherein said sleeve is filled with a liquid and wherein said liquid light guide is** [and] capable of vibrationally isolating the illumination apparatus from the image acquisition system; and

a database system coupled to the image acquisition system, the database system being adapted to be populated with information of the image of the plurality of manipulated cells;

wherein the information comprises a plurality of descriptors, each of the descriptors comprising a plurality of features, each of the features corresponding to a cellular or subcellular component from the plurality of manipulated cells.